

# *The Demography of the Territory's 'Midtowns': Jabiru (Issue No.201401)*

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## KEY FINDINGS

- The West Arnhem shire grew at a slightly slower rate from 2001 to 2011 (16%) than the Northern Territory (17%) and considerably slower than the neighbouring shire of East Arnhem (25%).
- In the 10 year period between 2001 and 2011, Jabiru grew by 4.5% to reach an estimated resident population of 1,286.
- By 2011, Jabiru was made up largely of working age non-Indigenous residents, and school age and early working age Indigenous residents.
- In 2011, 21% of Jabiru's residents were Indigenous (Aboriginal or Torres Strait Islander), slightly up on 2006 (18%), having gained on a net basis Indigenous residents aged 30-34 years and lost residents aged 25-29 years.
- Non-Indigenous residents tended to migrate to and from Jabiru to interstate, while Indigenous residents migrated in and from Jabiru to Greater Darwin and interstate.
- The number of private dwellings in Jabiru increased by 44% between 2006 and 2011. The percentage of dwellings being rented in Jabiru (95%) was much higher than the NT (49%), but median rent as a proportion of income was significantly lower at 2% compared to 13% and 23% for the NT and Australia respectively.
- Prominent industries in Jabiru in 2011 were Mining (37%) and Accommodation and Food Services (15%).
- Overall, improvements were seen in educational attainment and post-school qualifications in Jabiru. However, there was a decrease in the proportion of Indigenous residents whose highest level of schooling attained was years 11 or 12 and an increase in the highest level being years 9 or 10.

## RESEARCH AIM

*This research brief is part of a series on the changing demography of the Northern Territory's 'Midtowns' – Tenant Creek, Katherine, Jabiru and Nhulunbuy.*

*This brief explains the major characteristics and changing nature of the resident population of Jabiru from 2006 to 2011, based on Census data and population estimates. We compare and contrast the changing resident population of the town of Jabiru and the surrounding West Arnhem region to other jurisdictions.*

*The research was conducted by **Huw Brokensha** and **Andrew Taylor** and was partially funded by the Northern Territory Department of Treasury and Finance Demographic Research Grant.*

## 1. INTRODUCTION

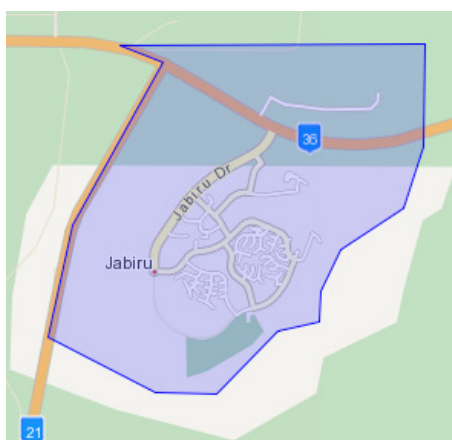
This research brief is part of a series on the changing demography of the Northern Territory's 'Midtowns' – Tennant Creek, Katherine, Jabiru and Nhulunbuy. Demographic change in small settlements in remote areas can be rapid and substantial, shifting the demand and need for services or infrastructure. This research brief aims to capture the major characteristics and changing nature of the resident population of Jabiru from 2006 to 2011 using Census data and population estimates. This research is funded by a Demographic research grant from the Northern Territory Department of Treasury and Finance, however all information and opinions presented in this series are those of the authors.

### 1.1. Data Sources and Geography

This research brief discusses recent population change for Jabiru town and the surrounding shire region of West Arnhem. The data for Jabiru and the surrounding regions are compared in parts to the rest of the Northern Territory (NT). The data used for this research brief was based on the ABS Census' 2006 & 2011 Place of Usual Residence database, and the ABS collection 3218.0 – *Regional Population Growth, Australia, 2011*.

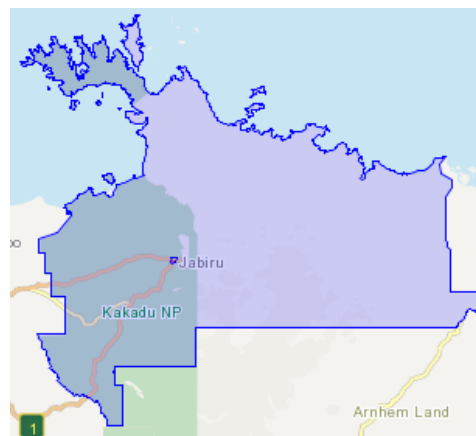
It should be noted that there were significant changes to ABS Geography with the Australian Statistical Geography Standard (ASGS) being implemented in 2011 (ABS, 2011a). For this brief we were able to breakdown the Local Government Area (LGA) of West Arnhem into two Statistical Local Areas (SLA) and make comparisons between the West Arnhem (S) – Jabiru, further referred to as 'Jabiru' (Figure 1), and West Arnhem (S) – Balance, further referred to as 'remainder of West Arnhem' (Figure 2). Figure 3 shows the LGA of East Arnhem Shire, which borders West Arnhem Shire and has been used for population change comparisons.

**Figure 1:** West Arnhem (S) - Jabiru (SLA) boundary.



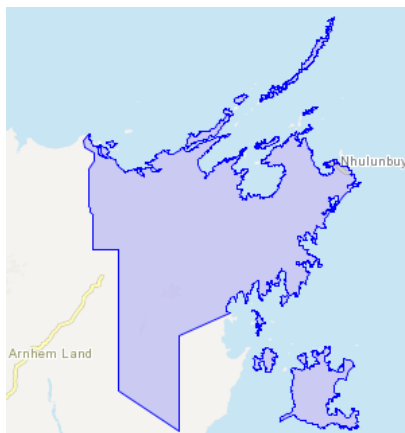
SOURCE: ABS, MapData Services

**Figure 2:** West Arnhem (S) – Balance (SLA) boundary.



SOURCE: ABS, MapData Services

**Figure 3:** East Arnhem Shire (LGA)



SOURCE: ABS, MapData Services

### 1.2. West Arnhem Shire overview

West Arnhem Shire covers an area of almost 50,000km<sup>2</sup> of natural landscape in the western part of Arnhem Land. The shire incorporates five towns including the major township of Jabiru and the Aboriginal communities of Minjilang, Waruwi, Maningrida and Gunbalanya (West Arnhem Shire, 2013). These 5 towns account for 85% of the population of West Arnhem Shire.

### 1.3. Jabiru overview

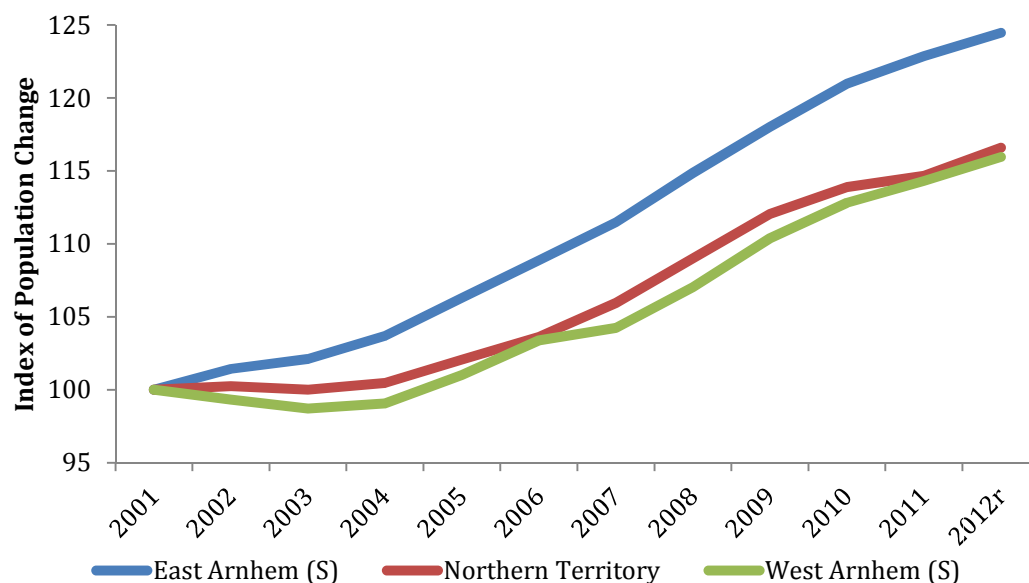
Jabiru is the major township in the World Heritage-listed Kakadu National Park, about 250kms south east of Darwin on the Arnhem Highway. Jabiru was established at its current site in 1982 to service the nearby Ranger uranium mine (West Arnhem Shire, 2013).

## 2. POPULATION CHANGE

### 2.1 Indexed Population Change

To compensate for Census counting issues, the ABS generates Estimated Resident Populations (ERP) by adjusting Census counts to produce population estimates. Indexing allows comparisons of varying population sizes by rebasing the population to 100 for each region. Figure 4 shows the change in ERP for the LGA of East Arnhem and West Arnhem, and for the NT. The West Arnhem Shire's population increased by over 730 people (an 11.3% increase) in the 5 year period between 2007 and 2012. In comparison, the NT as a whole experienced a 10% increase during this period.

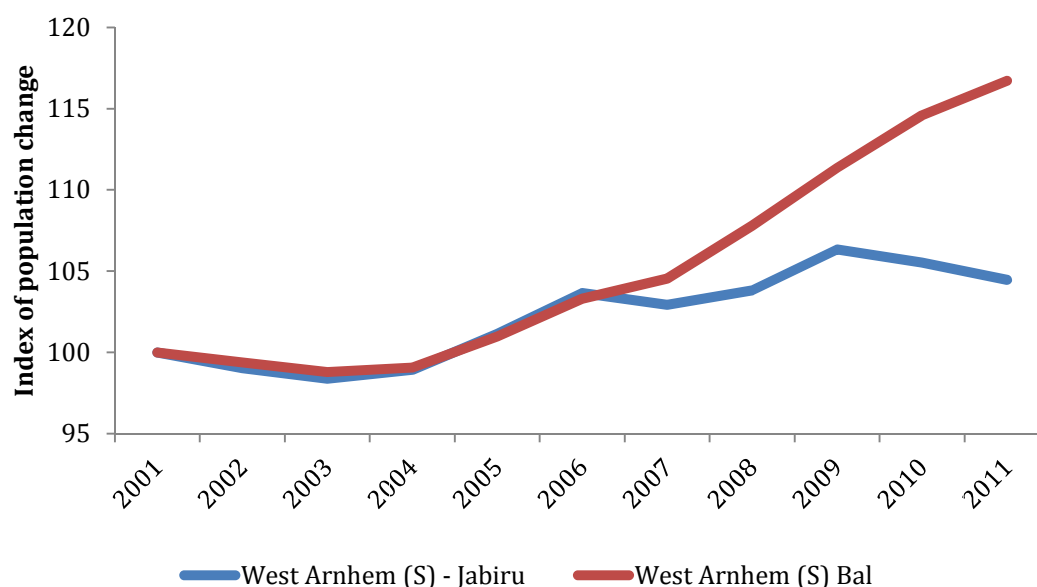
**Figure 4:** Indexed population change for selected NT shires (2001 = 100)



SOURCE: ABS 3218.0, released 30/08/2013

Figure 5 shows the indexed population change for Jabiru and the remainder of West Arnhem. It shows an increase in the population for the remainder of West Arnhem since 2006, whereas the population of Jabiru remained relatively stationary (despite some slight movements) since 2006. Between 2001 and 2011 the population of Jabiru changed by 4.5% to reach an estimated population of 1,286 whilst the remainder of the West Arnhem changed by 16.7% to reach an estimated population of 5,847.

**Figure 5:** Indexed population change for Jabiru and remainder of West Arnhem (2001 = 100)



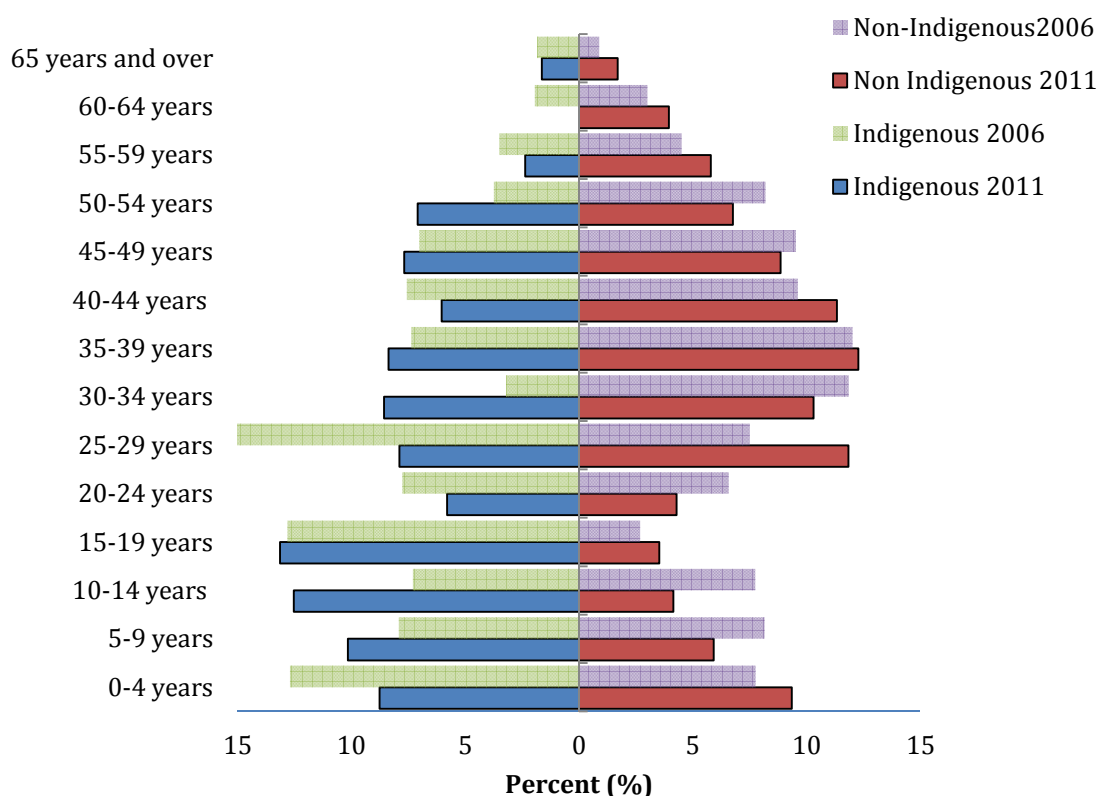
SOURCE: ABS 3218.0, released 30/08/2013

## 2.2 Changes to age, sex and Indigenous compositions

From the 2011 Census, Jabiru had a male dominated gender ratio of 125 males per 100 females (627 males and 501 females). In comparison the sex ratio for the NT was 109 males per 100 females. In 2006, the sex ratio for Jabiru was 143, so over time the township is aligning closer to the Territory's sex ratio. The Indigenous population represented 19% of the total male population of Jabiru, 24% of the total female population, and 21% of the total population of Jabiru.

Figure 6 shows the change to Jabiru's population between Census periods 2006 and 2011. In 2011, there were fewer school age and more young working age non-Indigenous residents and more early school age and fewer Indigenous residents aged 55 years and over than in 2006. Jabiru was largely made up of younger and school age Indigenous residents and working age non-Indigenous residents.

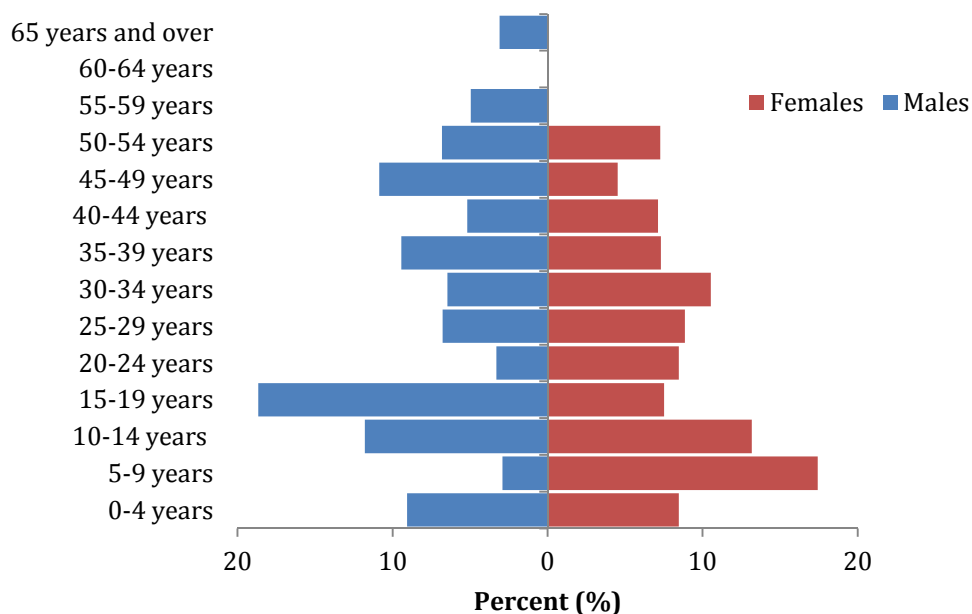
**Figure 6:** Jabiru Population Pyramid, 2011 and 2006



SOURCE: ABS Census 2011, generated using ABS TableBuilder 2012

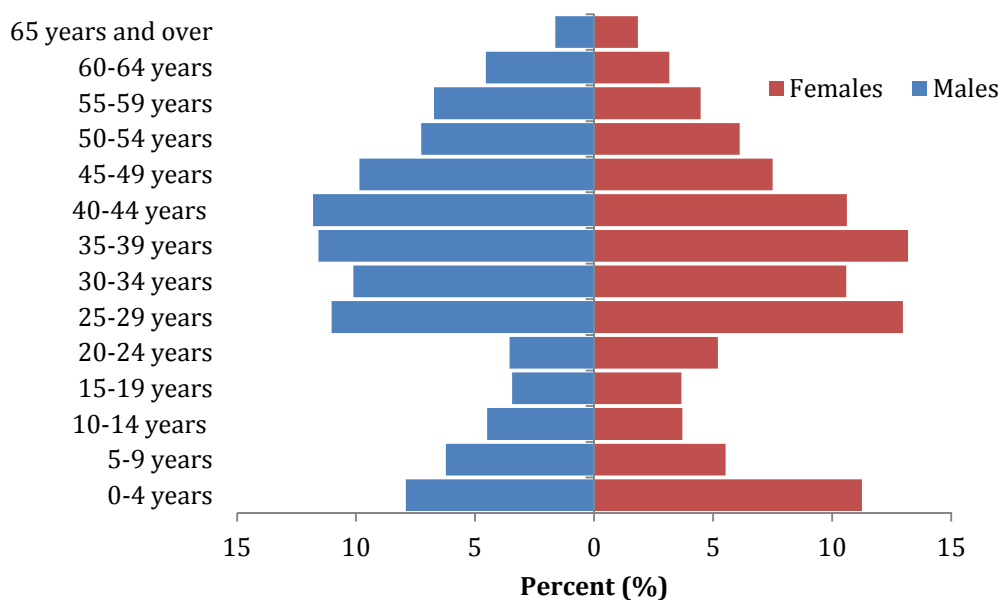
Figures 7 and 8 show the population differences between Indigenous and non-Indigenous residents in Jabiru. The largest proportions of Indigenous male residents were in the 15-19 years and females in the 5-14 years. The non-Indigenous male population was largest in the 25-49 years and females in the 0-4 years and the 25-44 years age range.

**Figure 7:** Jabiru Indigenous population pyramid, 2011



SOURCE: ABS Census 2011, generated using ABS TableBuilder 2012

**Figure 8:** Jabiru non-Indigenous population pyramid, 2011



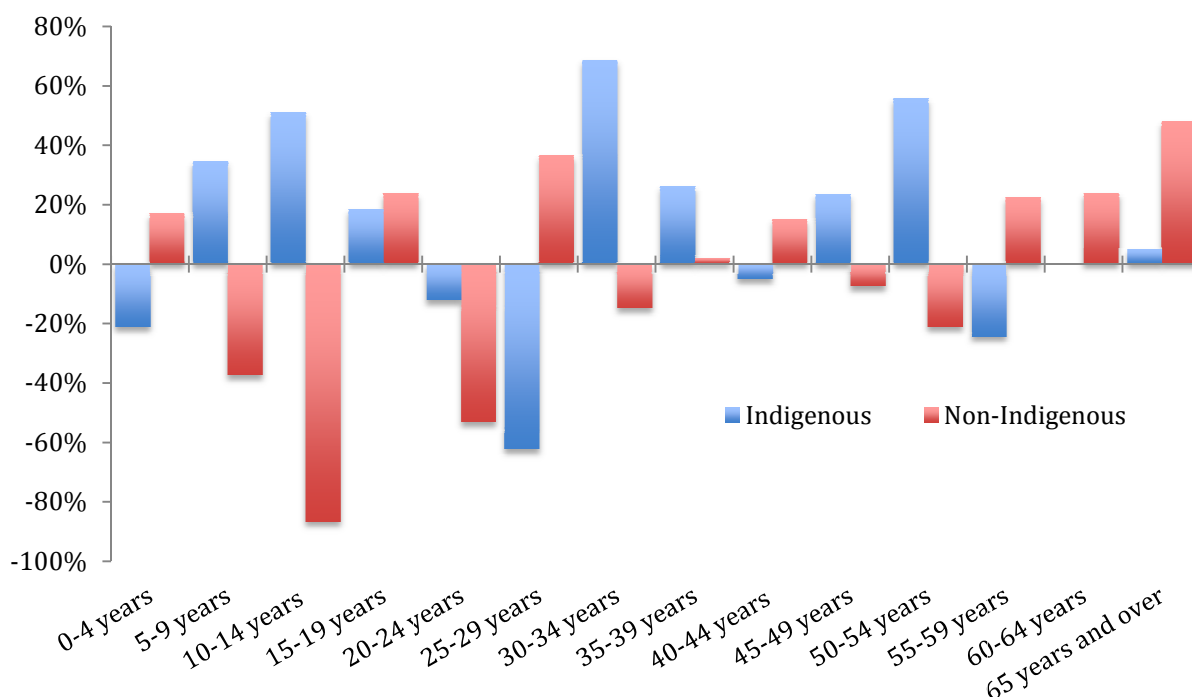
SOURCE: ABS Census 2011, generated using ABS TableBuilder 2012

Net population change is calculated by subtracting the 2006 resident population for each age group from the 2011 resident population. These should be seen as indicative as no adjustments for possible Census counting issues (people missed, double counted and so on) are incorporated. There was a considerable net loss of non-Indigenous people age 10-14 and 20-24 years and net gains in 25-29 years



and 55 and over. The Indigenous population had significant net gains in ages 10-14, 30-34 and 50-54 years and losses in 0-4, 25-29 and 55-59 year olds (Figure 9).

**Figure 9:** Net population change, Jabiru 2006-2011



SOURCE: ABS Census 2011, generated using ABS TableBuilder 2012

### 3. POPULATION TURNOVER

Population turnover is measured as the absolute sum of intra-Territory, interstate and overseas migration as a proportion of the 2011 resident population. Between 2006 and 2011, turnover for Jabiru was 95%. Table 1 shows the number of residents who moved into and out of these areas by the type of migration flow. Interstate migration was the main contributor for Jabiru's turnover at 57%, with intra-Territory migration at 32%.

Jabiru lost 7.7% (87) residents (net) to interstate migration, but this was offset somewhat by people migrating in from overseas (5.9% or 66 residents). The total turnover figure is conservative since no measure of the number of former Jabiru residents now living overseas is available and this is likely to have increased turnover to above 100%.

**Table 1:** Population turnover, Jabiru 2011

Turnover category	In	Out	Net	Jabiru Turnover*
Intra-Territory	180	184	-4	32.3%
Interstate	277	364	-87	56.8%
Overseas**	66	Unknown	Unknown	5.9%
<b>Total</b>	<b>523</b>	<b>548</b>	<b>-91</b>	<b>94.9%</b>

\* The absolute sum of in and out migration divided by the resident population of the region at 2011.

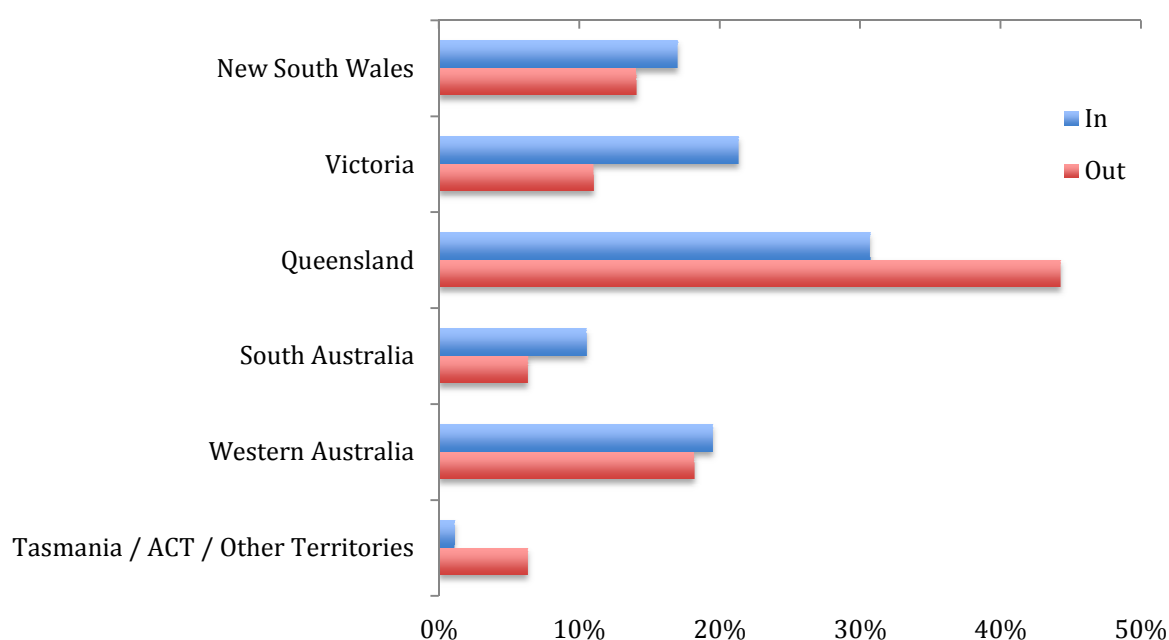
\*\* These figures include only overseas migration into the region or town and not out of them.

SOURCE: ABS Census 2011, generated using ABS TableBuilder 2012

### 3.1. Interstate migration

Between 2006 and 2011, 277 people migrated to Jabiru from interstate. The majority, nearly a third came from Queensland (31%), followed by Victoria (21%) and Western Australia (19%), with just under half (47%) of interstate migrants being female (Figure 10). The largest proportions of interstate migrants were aged 25-39 years and 94% of interstate migrants were non-Indigenous. Over the same period 364 people migrated interstate from Jabiru, the majority of whom went to Queensland (44%), followed by Western Australia (18%) and New South Wales (14%), with 48% of out migrants being female. The largest proportions of out migrants were aged 5-14 years and 30-44 years and Indigenous people comprised 9% of all out migrants.

**Figure 10:** Sources of interstate movers (in and out migrants), Jabiru 2006 - 2011



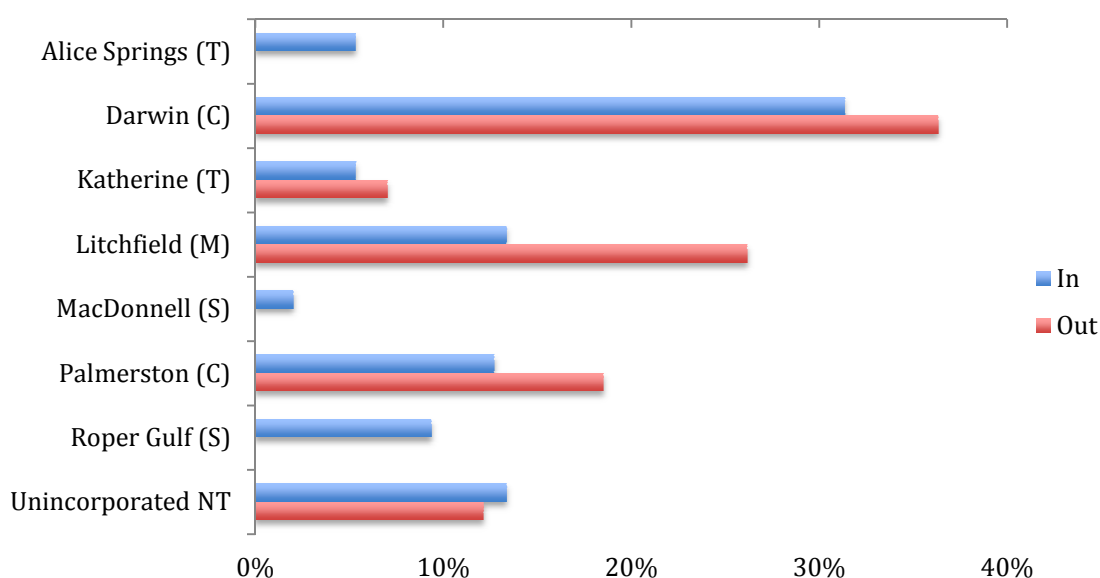
SOURCE: ABS Census 2011, generated using ABS TableBuilder 2012



### 3.2. Intra-Territory migration

There were 180 people who migrated to Jabiru from within the NT between 2006 and 2011, of which half were female. The largest proportions of people migrating to Jabiru were aged 25-39 years and a third (33%) of in migrants were Indigenous. The largest proportions migrating to Jabiru were from Darwin (36%), followed by Litchfield and the unincorporated areas of the NT, both at 13%. There were some migrants who came to Jabiru from Roper Gulf (9%), Alice Springs (5%) and MacDonnell (2%) but there were no migrants who left Jabiru to go to these places (Figure 11). 184 people migrated out of Jabiru to other regions within the NT. Of these 54% were female and 31% were Indigenous. The most popular destination for Jabiru out migrants was Greater Darwin; with 36% heading to Darwin, 26% to Litchfield and 19% to Palmerston.

**Figure 11:** Sources of intra-Territory movers (in and out migrants), Jabiru 2006 - 2011



SOURCE: ABS Census 2011, generated using ABS TableBuilder 2012

## 4. NEW MIGRANT COMMUNITIES

### 4.1 Overseas immigrants

Between 2006 and 2011, 66 people who were previously resident overseas migrated to Jabiru. 52% were female, with the largest proportions being aged 25-39 years and 45-49 years. Of the males, the largest proportions were aged 25-34 years and 40-44 years. Of these 66 overseas migrants 55 were born overseas, contributing 27% to the total overseas born population (Table 2).

The majority of overseas born residents by 2011 were from New Zealand, Maritime South-East Asia, the United Kingdom, Northern America and Melanesia (Table 3). These top 5 countries made up 61% of the overall overseas born population.

**Table 2:** Overseas born population of Jabiru (not including overseas visitors)

Measure	Jabiru			
	2006		2011	
	No.	% of total	No.	% of total
Total population*	1139	100%	1128	100%
Overseas born	129	11.3%	201	17.8%
Australian born	672	59.0%	794	70.4%
Not stated	338	29.7%	133	11.8%
Ratio residents to o/s born	5.2		4.0	

\* may vary slightly due to perturbation.

SOURCE: ABS Census 2011, generated using ABS TableBuilder 2012

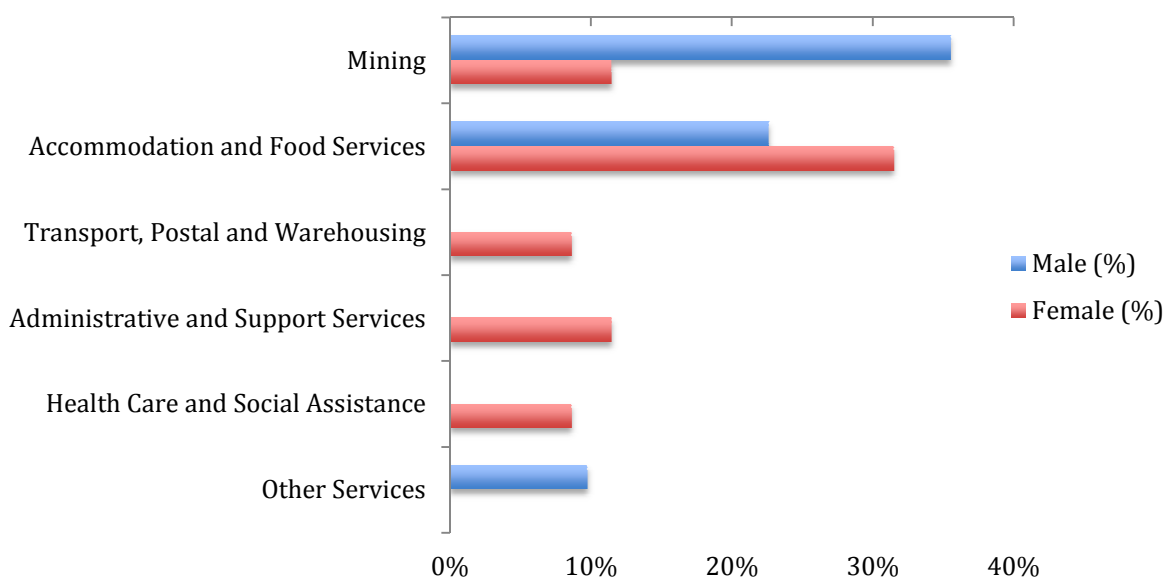
**Table 3:** Source nations for overseas born residents, Jabiru.

2006			2011			
Rank	Country	Persons	Rank	Country	Persons	% of o/s born 2011
1	United Kingdom	26	1	New Zealand	34	16.9%
2	New Zealand	21	2	Maritime South-East Asia	30	14.9%
3	Maritime South-East Asia	16	3	United Kingdom, Channel Islands and Isle of Man	21	10.4%
4	Western Europe	14	4	Northern America	19	9.5%
5	Southern and East Africa	10	5	Melanesia	19	9.5%
	<b>Top 5</b>	<b>87</b>		<b>Top 5</b>	<b>123</b>	<b>61.2%</b>

SOURCE: ABS Census 2011, generated using ABS TableBuilder 2012

Figure 12 shows the industries of employment for Jabiru's new overseas migrants who arrived between 2006 and 2011. Mining and Accommodation & Food Services were the two main industries of employment for both male and female overseas migrants. With 35% of males and 11% of females reporting that they were working in the mining sector and 23% of males and 31% of females reporting they worked in Accommodation & Food Services.

**Figure 12:** Industries of employment for Jabiru's new overseas migrants, 2011



SOURCE: ABS Census 2011, generated using ABS TableBuilder 2012

## 5. CHANGES IN HOUSING

Between 2006 and 2011, the number of private dwellings in Jabiru increased by 44%. However, 21% of these dwellings were recorded as unoccupied at the time of the 2011 Census. The number of separate houses (4%), semi-detached or townhouses (70%), and flats, units or apartments (52%) all increased while other dwelling types such as caravans/cabins, sleeping out, and improvised dwellings decreased by 76% (Table 4).

**Table 4:** Changing housing stock in Jabiru

Type of dwelling	2006	2011	Net additions	Change 2006 to 2011
Separate house	195	203	8	4%
Semi-detached, row or terrace house, townhouse etc.	10	17	7	70%
Flat, unit or apartment	75	114	39	52%
Other dwelling	21	5	-16	-76%
Unoccupied private dwellings	0	89	89	n.a.
Dwelling structure not stated	0	4	4	n.a.
<b>Total</b>	<b>301</b>	<b>432</b>	<b>131</b>	<b>44%</b>

SOURCE: ABS Census 2011, generated using ABS TableBuilder 2012

Most of the dwellings in Jabiru (95%) and the remainder of West Arnhem (91%) were rented, significantly higher than NT as a whole which had less than half (49%) of its dwellings rented (Table 5). Median rental repayments in Jabiru (2%) and the remainder of West Arnhem (4%) were considerably low as a proportion of household income, with the NT average being 13%. Home ownership in both Jabiru (2%) and remainder of West Arnhem (3%) was much lower than the Territory (46%) and Australia (67%).

**Table 5:** Owning/mortgaging and renting/rent as a percentage of household income, 2011

Cost of housing	Jabiru	Remainder of West Arnhem	Tennant Creek	Barkly Region	NT	Australia
Buying or own	2%	3%	35%	24%	46%	67%
Mortgage as % of income	1%	0%*	17%	19%	31%	36%
Renting	95%	91%	57%	66%	49%	30%
Rent as % of income	2%	4%	9%	5%	13%	23%

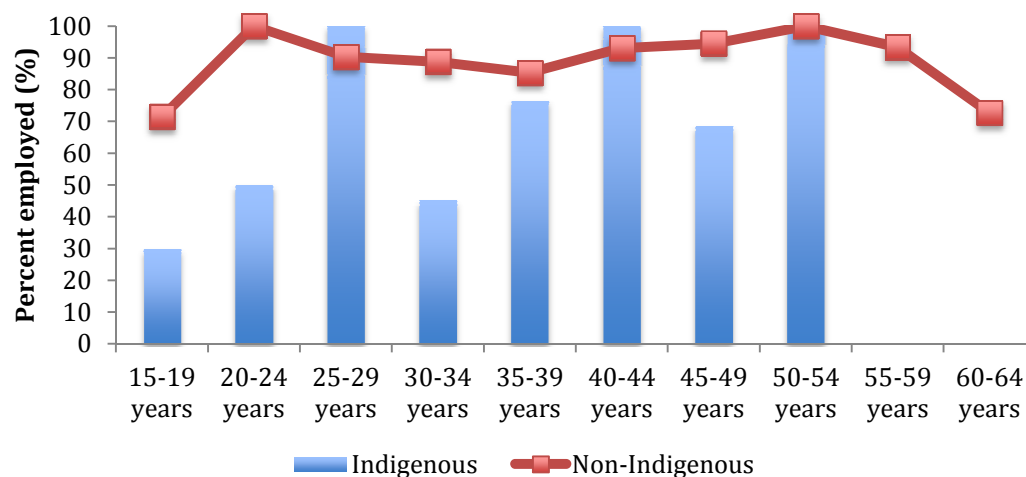
\* all dwellings reported as being owned

SOURCE: ABS Census 2011, generated using ABS TableBuilder 2012

## 6. LABOUR FORCE CHARACTERISTICS

Being a mining town Jabiru generally had a strong level of employment participation. Between the ages of 15-64 years, 63% of the Indigenous population were employed and 8% unemployed. This compares to 90% of the non-Indigenous population who were employed and 0% unemployed. The rest of the residential population in these age ranges were not actively seeking employment so were not considered to be in the labour force. Indigenous employment levels were particularly strong (100%) in the 25-29 years, 40-44 years and 50-54 years (Figure 13). Non-Indigenous employment was strong (at 85% or above) across the 20-59 year age ranges.

**Figure 13:** Jabiru employed residents, 2011

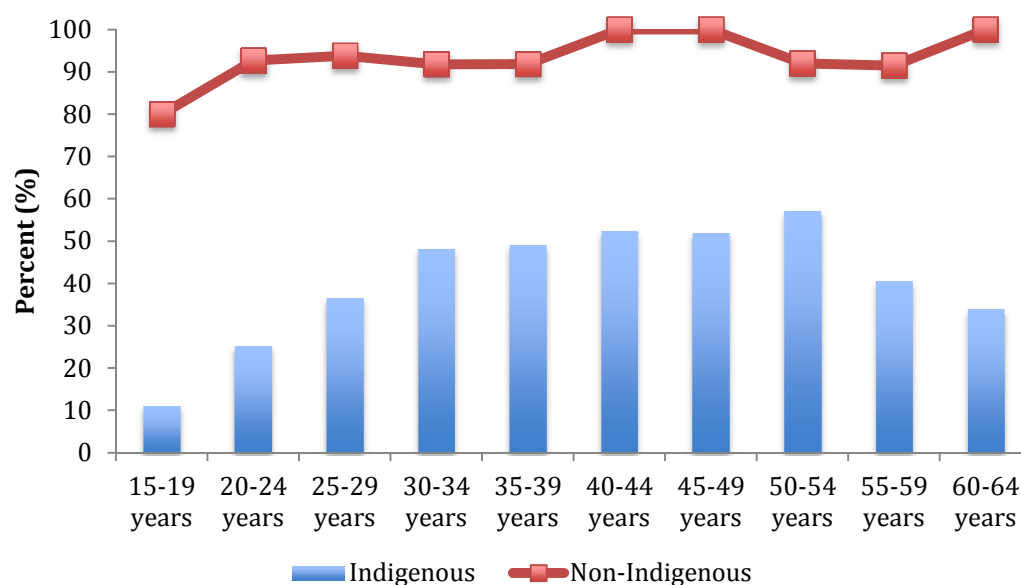


SOURCE: ABS Census 2011, generated using ABS TableBuilder 2012

In comparison, Indigenous residents in the remainder of West Arnhem had much lower employment participation figures (Figure 14) with 37% of the Indigenous population employed and 11% unemployed. The remainder of West Arnhem however had particularly high employment levels for non-Indigenous residents (94% employed and 0% unemployed).

The labour force status category used for this analysis classifies employed persons as those with full or part-time/casual employment; this includes persons working under the Community Development Employment Projects (CDEP). Unemployed persons include people who are actively looking for full or part-time/casual work (ABS, 2011b).

**Figure 14:** Remainder of West Arnhem employed residents, 2011

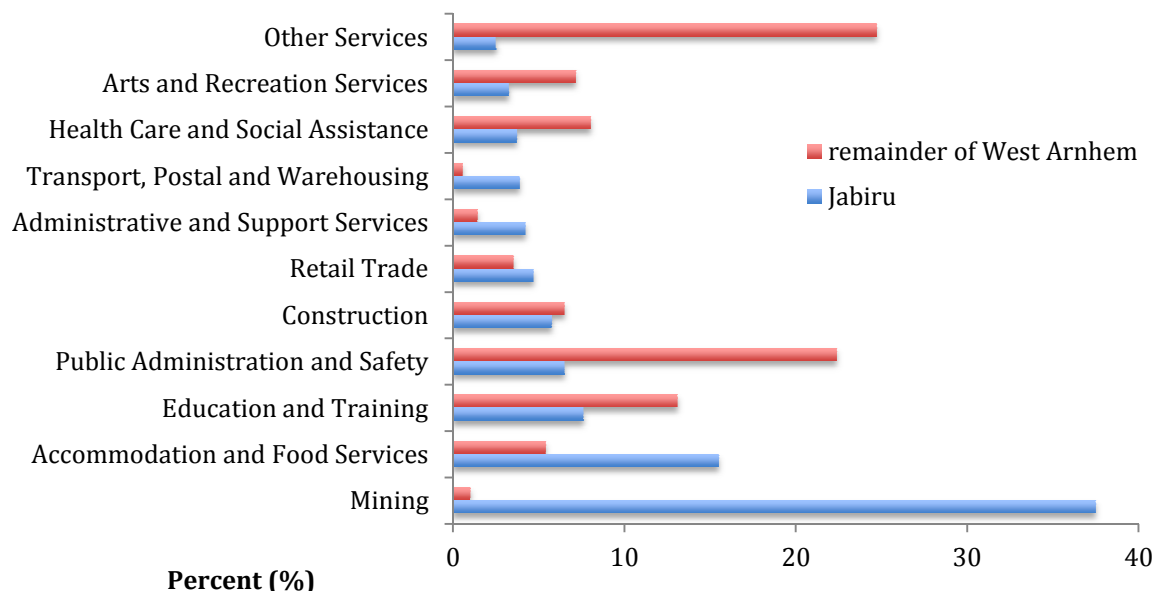


SOURCE: ABS Census 2011, generated using ABS TableBuilder 2012

### 6.1 Industries of employment

In Jabiru the main industries of employment did not change significantly from 2006. The Mining industry employed 37%, and Accommodation & Food Services 15% (Figure 15). In the remainder of West Arnhem service provision accounted for over a quarter of employed persons (Other Services 25%) and Public Administration & Safety 22%.

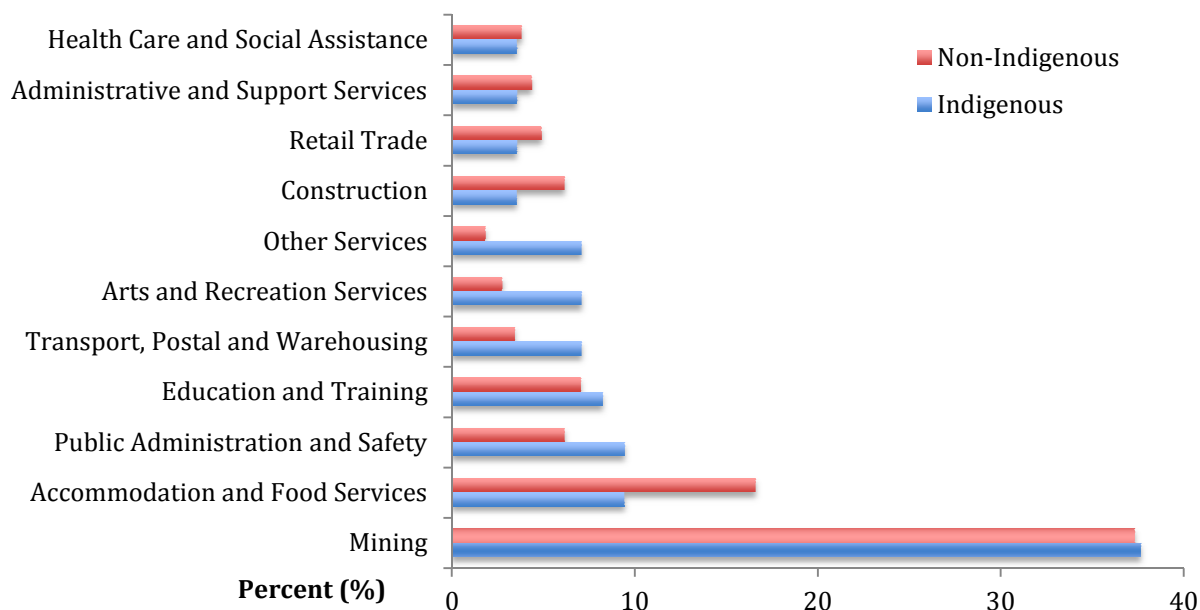
**Figure 15:** Main industries of employment in Jabiru and remainder of West Arnhem, 2011



SOURCE: ABS Census 2011, generated using ABS TableBuilder 2012

Mining was the main industry of employment for Indigenous (38%) and non-Indigenous (37%) residents in Jabiru (Figure 16), followed by Accommodation & Food Services (9% and 17% respectively).

**Figure 16:** Main industries of employment in Jabiru by Indigenous status, 2011



SOURCE: ABS Census 2011, generated using ABS TableBuilder 2012



## 7. EDUCATION

Table 6 shows the highest level of schooling attained by residents of Jabiru and compares it to 2006. It indicates that over the years, the proportion of people who had completed years 11 or 12 increased, particularly for Indigenous residents. However, when looking at just the 15-29 years (Table 7) the proportion of Indigenous residents who completed years 11 or 12 decreased by 9%, with more Indigenous 15-29 year olds leaving school in years 9 or 10.

**Table 6:** Highest level of schooling attained across ages 15 and over, Jabiru

% of stated responses across all ages	Jabiru			
	2006		2011	
	Indigenous	Non-Indigenous / Not stated	Indigenous	Non-Indigenous / Not stated
Yr 11 or 12	32%	68%	37%	70%
Yr 9 - 10	41%	31%	40%	28%
Yr 8 or below	25%	1%	23%	2%
Did not go to school	3%	1%	0%	0%

\*due to rounding may not add to 100%

SOURCE: ABS Census 2011, generated using ABS TableBuilder 2012

**Table 7:** Highest level of schooling attained across ages 15 – 29 years, Jabiru

% of stated responses for 15 - 29 years	Jabiru			
	2006		2011	
	Indigenous	Non-Indigenous / Not stated	Indigenous	Non-Indigenous / Not stated
Yr 11 or 12	43%	79%	34%	78%
Yr 9 - 10	36%	21%	51%	20%
Yr 8 or below	21%	0%	15%	3%
Did not go to school	0%	0%	0%	0%

\*due to rounding may not add to 100%

SOURCE: ABS Census 2011, generated using ABS TableBuilder 2012

Table 8 shows the highest level of post-school qualifications for Jabiru. Overall, it shows an increase in the proportion of residents with post-school qualifications in 2011, up from 63% in 2006 to 86% in 2011. This increase was particularly in Certificate level qualifications where over a quarter (26%) of Indigenous and non-Indigenous residents attained these qualifications.

**Table 8:** Highest level of post-school qualifications for Jabiru

% of responses across all ages	Jabiru			
	2006		2011	
	Indigenous	Non-Indigenous / Not stated	Indigenous	Non-Indigenous / Not stated
Bachelor or above	3%	16%	0%	20%
Advanced diploma	4%	7%	5%	8%
Certificate	15%	17%	26%	26%
Inadequately described	0%	0%	0%	1%
<b>Total</b>	<b>22%</b>	<b>41%</b>	<b>31%</b>	<b>55%</b>

SOURCE: ABS Census 2011, generated using ABS TableBuilder 2012

## 8. CONCLUSION

This research brief has summarised the changing population of Jabiru and the remainder of the West Arnhem. Between 2006 and 2011 population in the region increased, with the strongest growth in the area outside of Jabiru. Jabiru had a more male dominated population than the NT as a whole, with both males and females tending to work in the Mining and the Accommodation & Food Services industries.

Population turnover in Jabiru was largely made up of interstate migration, with the majority of migrants to and from Jabiru coming from Queensland. Most of these migrants were from the main working ages. Intra-Territory migration also contributed strongly to the population turnover of Jabiru, with most in and out migrants coming from Greater Darwin. In Jabiru, median rent is considerably low as a proportion of income and most of the dwellings in Jabiru are rented. Educational attainment and post-school qualifications generally improved for Indigenous and non-Indigenous residents between 2006 and 2011, however for 15-29 year old Indigenous residents there was a decrease in the proportion completing years 11 or 12 and an increase in this cohort leaving in years 9 or 10.

## REFERENCES

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